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EXAMINER

VU, TRISHA U

ART UNIT

PAPER NUMBER

2112

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,522

Applicant(s)

HANSON ET AL.

Examiner

Trisha U. Vu

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) *
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2112

DETAILED ACTION

1. Claims 1-69 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter “the slot configured to be located overlying a back side of the handheld computer” which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 47-49, 52, 54-55, 61, 64, and 66-67 rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) in view of “Socket to Support

Art Unit: 2112

World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA).

As to claims 47, 48, 64, Ito teaches an expansion device (device 1 and other connected modules as shown in Fig. 1) for a portable electronic device (PC 5), comprising: a card (device 1) including an interface configured to be coupled to the electronic device (Fig. 4A); an accessory device (at least one of connected devices such as SD card, battery, antenna, ...) coupled to the card; an expansion slot (at least slot for connecting a SD card) coupled to the card, the expansion slot configured to selectively couple to one of a Secure Digital (SD) card and a multimedia card (MMC) (note Fig. 1 and [0031], [0032]). However, Ito does not explicitly disclose the card being SDIO card. SDA teaches developing SDIO card products (pages 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the card to be SDIO card as taught by SDA in the system of Ito to provide a compact product wherein the SDIO cards will make it easy to add input/output capability such as Bluetooth wireless networking and Ethernet connectivity to future handheld computers, Internet appliances and other portable electronic devices (pages 1-2).

As to claim 49, Ito further teaches the interface is configured to be coupled to a slot in a housing of the portable electronic device (Fig. 4A).

As to claim 52, Ito further teaches the accessory device includes an audio player (audio record/reproduce device) (note [0034]).

As to claim 54, Ito further teaches the accessory device includes voice recorder (record/reproduce device) (note Fig. 1 and [0109]-[0111]).

Art Unit: 2112

As to claim 55, Ito further teaches the accessory device includes Bluetooth transceiver (Fig. 1 and [0039], [0040]).

As to claim 61, Ito further teaches the accessory device includes a pedometer (travel distance detecting circuit) (note [0043], [0097]).

As to claims 66 and 67, Ito further teaches the expansion slot is configured to accept a battery and the battery is rechargeable (note [0045]).

4. Claims 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) and “Socket to Support World’s Smallest Plug-in Card for Mobile Connectivity” (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), and further in view of Petty (6,389,486).

As to claims 50 and 51, the argument above for claim 47 applies. However, Ito and SDA do not explicitly disclose the accessory device includes a positioning system device. Petty teaches positioning system device (GPS cards) (col. 1, lines 43-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include GPS receiver as taught by Petty in the expansion module of Ito and SDA to provide the geographic location of the module.

5. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) and “Socket to Support World’s Smallest Plug-in Card for Mobile Connectivity” (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), and further in view of Hawkins et al. (6,442,637) (herein after Hawkins).

Art Unit: 2112

As to claim 53, the argument above for claim 52 applies. However, Ito and SDA do not explicitly disclose the accessory device includes an MP3 player. Hawkins teaches MP3 player (col. 4, lines 13-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a MP3 player as taught by Hawkins in the expansion module of Ito and SDA because MP3 player produces CD-quality music in a compressed file that can be transferred quickly.

6. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) and "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), and further in view of Jones (6,145,046).

As to claim 56, the argument above for claim 47 applies. However, Ito and SDA do not explicitly disclose the accessory device includes a digital camera. Jones teaches digital camera using memory card (Fig. 1A and col. 3, lines 6-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement digital camera as taught by Jones in the system of Ito and SDA to provide picture capture function to the expansion module without using photographic film.

7. Claims 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) and "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), and further in view of Nakashima (6,182,204).

Art Unit: 2112

As to claims 57-59, the argument above for claim 47 applies. However, Ito and SDA do not explicitly disclose the accessory device includes a FM tuner and/or television tuner. Nakashima discloses FM tuner and television tuner (col. 1, lines 14-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include FM tuner and/or television tuner as disclosed by Nakashima in the expansion module of Ito and SDA for further receiving television and/or radio broadcasts to the system.

8. Claims 60 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) and “Socket to Support World’s Smallest Plug-in Card for Mobile Connectivity” (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), and further in view of Yu (6,362,794)

As to claims 60 and 69, the argument above for claim 47 applies. However, Ito and SDA do not explicitly disclose the accessory device includes a wireless networking card. Yu teaches wireless networking card (wireless LAN card) (note col. 1, lines 6-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include wireless LAN card as taught by Yu in the expansion module of Ito and SDA to provide connection to a wireless network.

9. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) and “Socket to Support World’s Smallest Plug-in Card for

Art Unit: 2112

Mobile Connectivity” (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), and further in view of Rajchel (6,272,575).

As to claim 62, the argument above for claim 47 applies. Ito and SDA do not explicitly disclose the accessory device includes a cellular telephone transceiver. Rajchel discloses a card module to receive cellular telephone transceivers to be used with a handheld computer (col. 4, lines 25-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include cellular telephone transceiver as taught by Rajchel in the expansion module of Ito and SDA to quickly establish a national telecommunications network.

10. Claims 63 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) and “Socket to Support World’s Smallest Plug-in Card for Mobile Connectivity” (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), and further in view of Jones et al. (6,438,638).

As to claim 63, the argument above for claim 47 applies. However, Ito and SDA do not explicitly disclose the expansion slot is configured to accept a MMC card. Jones et al. teaches slot configured to accept MMC card (MMC/SD 28) (at least Fig. 9 and col. 5, lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include MMC card as taught by Jones et al. in the system of Ito and SDA to add portable storage functionality to the computer wherein the cards provide smaller size than older memory card formats, such as SmartMedia and Compactflash.

Art Unit: 2112

As to claim 65, Jones further teaches both of a SD card and a MMC card may be used selectively and singularly in the expansion slot (at least Fig. 9 and col. 5, lines 15-25).

11. Claims 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 2001/0042149) (herein after Ito) in view of "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA) and further in view of Harari et al. (6,266,724).

As to claim 68, the arguments above for claim 47 apply. However, Ito and SDA do not explicitly disclose a second expansion slot coupled to the SDIO card, the second expansion slot configured to selectively couple to at least one of a Secure Digital (SD) card and a multimedia card (MMC). Harari teaches a second expansion slot (plurality of slots) coupled to an expansion card (mother card), the slots configured to selectively couple to a plurality of card (col. 4, lines 56-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a second expansion slot as taught by Harari in the system of Ito and SDA to connect to more MMC/SD cards to expand the system connection and functionality.

12. Claims 1-3, 14, 18-21, 23-26, 37, 41-44, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al. (6,266,724) in view of "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000)

Art Unit: 2112

(hereinafter SDA), in view of Jones et al. (6,438,638), and further in view of Friend et al. (Pub. No. US 2001/0032165) (hereinafter Friend).

As to claims 1, Harari teaches an expansion device (mother/daughter card 100) for a handheld computer, comprising: a card (at least mother card or mother card and some daughter card(s) in combination) including an interface configured to be coupled to the handheld computer in a slot in a housing of the handheld computer (Fig. 1); an accessory device (one of the daughter cards/battery pack) coupled to the card (col. 10, lines 58-60); an expansion slot coupled to the card (one of the plurality of slots for receiving the daughter cards). However, Harari does not explicitly disclose the card being SDIO card. SDA teaches developing SDIO card products (pages 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the card to be SDIO card as taught by SDA in the system of Harari to provide a compact product wherein the SDIO cards will make it easy to add input/output capability such as Bluetooth wireless networking and Ethernet connectivity to future handheld computers, Internet appliances and other portable electronic devices (pages 1-2). However, Harari and SDA do not explicitly disclose the expansion slot configured to selectively couple to one of a Secure Digital (SD) card and a multimedia card (MMC). Jones et al. teaches slot configured to selectively couple to one of a SD card and a MMC (at least Fig. 9 and col. 5, lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include SD card and/or MMC as taught by Jones et al. in the system of Harari and SDA to add functionalities to the computer wherein the cards provide smaller size than older memory card formats, such as

Art Unit: 2112

SmartMedia and Compactflash. However, Harari, SDA, and Jones et al. do not explicitly disclose the slot configured to be located overlying a back side of the handheld computer. Friend teaches slot located overlying a back side of the computer for receiving expansion card (paragraph [0048]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the slot to be located overlying a back side of the computer as taught by Friend in the system of Harari, SDA, and Jones to provide a better (smoother) looking from the front side of the computer. Also, it would have been an obvious matter of designer choice to a person of ordinary skill in the art to implement the slot to be located overlying a back side of the computer because Applicant has not disclose that implementing the slot to be located overlying a back side of the computer provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the slot to be located on the side of the computer (Harari, Fig. 1) because the ability of the slot to receive the card is not affected by their location on the housing.

As to claim 24, Harari teaches a handheld computer comprising: a housing (in host system 200); a slot in the housing, the slot including an electrical connector (connector 212) (note Fig. 1); a card including an interface coupled to the slot in the housing and coupled to the electrical connector (note Fig. 1); an accessory device (one of the daughter cards/battery pack) coupled to the card (col. 10, lines 58-60); an expansion slot coupled to the card (one of the plurality of slots for receiving the daughter cards). However, Harari does not explicitly disclose the card being SDIO card. SDA teaches

Art Unit: 2112

developing SDIO card products (pages 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the card to be SDIO card as taught by SDA in the system of Harari to provide a compact product wherein the SDIO cards will make it easy to add input/output capability such as Bluetooth wireless networking and Ethernet connectivity to future handheld computers, Internet appliances and other portable electronic devices (pages 1-2). However, Harari and SDA do not explicitly disclose the expansion slot configured to selectively couple to one of a Secure Digital (SD) card and a multimedia card (MMC). Jones et al. teaches slot configured to selectively couple to one of a SD card and a MMC (at least Fig. 9 and col. 5, lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include SD card and/or MMC as taught by Jones et al. in the system of Harari and SDA to add functionalities to the computer wherein the cards provide smaller size than older memory card formats, such as SmartMedia and CompactFlash. However, Harari, SDA, and Jones et al. do not explicitly disclose the slot configured to be located overlying a back side of the housing. Friend teaches slot located overlying a back side of the housing for receiving expansion card (paragraph [0048]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the slot to be located overlying a back side of the housing as taught by Friend in the system of Harari, SDA, and Jones to provide a better (smoother) looking from the front side of the computer. Also, it would have been an obvious matter of designer choice to a person of ordinary skill in the art to implement the slot to be located overlying a back side of the computer because Applicant has not disclose that

Art Unit: 2112

implementing the slot to be located overlying a back side of the computer provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the slot to be located on the side(s) or the front side of the computer (Harari, Fig. 1) because the ability of the slot to receive the card is not affected by their location on the housing.

As to claims 2 and 25, Harari as modified by Jones et al. further teaches the SDIO card includes Secure Digital (SD) memory (as addressed in claim 1 above) (Jones et al., at least Fig. 9 and col. 5, lines 15-25).

As to claims 3 and 26, Harari further teaches the expansion device for a handheld computer of claim 1, wherein the interface is configured to be coupled to a slot in a housing of the handheld computer (Fig. 1).

As to claims 14 and 37, Harari further teaches the accessory device includes a networking card (col. 4, lines 65-67 and col. 5, lines 1-3).

As to claims 18 and 41, Jones et al. further teaches the expansion slot is configured to accept a MMC memory card (at least Fig. 9 and col. 5, lines 15-25).

As to claims 19 and 42, Jones et al. further teaches the expansion slot is configured to accept a SD memory card (at least Fig. 9 and col. 5, lines 15-25).

As to claims 20 and 43, Jones et al. further teaches both of a SD memory card and a MMC memory card may be used selectively and singularly in the expansion slot (at least Fig. 9 and col. 5, lines 15-25).

Art Unit: 2112

As to claims 21 and 44, Harari further teaches the expansion slot is configured to accept a battery (col. 10, lines 58-60).

As to claims 23 and 46, Harari as modified by Jones et al. further teaches a second expansion slot (another slot of the plurality of slots) coupled to the SDIO card, the second expansion slot configured to selectively couple to at least one of a SD card and a MMC card (as addressed above in claim 1, different kinds of cards and any number of cards can be used) (Harari, col. 4, lines 56-67).

13. Claims 4-5 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al. (6,266,724) in view of "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), Jones et al. (6,438,638), and Friend et al. (Pub. No. US 2001/0032165) (hereinafter Friend), and further in view of Petty (6,389,486).

As to claims 4-5 and 27-28, the arguments above for claims 1 and 24 apply.

However, Harari, SDA, and Jones et al. do not explicitly disclose the accessory device includes a positioning system device. Petty teaches positioning system device (GPS cards) (col. 1, lines 43-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include GPS receiver as taught by Petty in the expansion module of Harari, SDA, and Jones et al. to provide the geographic location of the module.

Art Unit: 2112

14. Claims 6-7 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al. (6,266,724) in view of "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), Jones et al. (6,438,638), and Friend et al. (Pub. No. US 2001/0032165) (hereinafter Friend), and further in view of Hawkins et al. (6,442,637) (herein after Hawkins).

As to claims 6-7 and 29-30, the arguments above for claims 1 and 24 apply.

However, Harari, SDA, and Jones et al. do not explicitly disclose the accessory device includes an audio player. Hawkins teaches an expansion audio player (MP3 player) coupled to a mobile computer (col. 4, lines 13-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a MP3 player as taught by Hawkins in the expansion module of Harari, SDA, and Jones et al. to provide audio player function to the module.

15. Claims 8-9, 16, 22, 31-32, 39, and 45, are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al. (6,266,724) in view of "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), Jones et al. (6,438,638), and Friend et al. (Pub. No. US 2001/0032165) (hereinafter Friend), and further in view of Ito et al. (US 2001/0042149) (herein after Ito).

As to claims 8 and 31, the arguments above for claims 1 and 24 apply. However, Harari, SDA, and Jones et al. do not explicitly disclose the accessory device includes a voice recorder. Ito teaches voice recorder accessory device (record/reproduce device) coupled to an expansion module (peripheral device 1) which is coupled to a mobile

Art Unit: 2112

computer (note Fig. 1 and [0109]-[0111]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement voice recording circuitry as suggested by Ito in the expansion device of Harari, SDA, and Jones et al. to provide recording function to the mobile computer.

As to claims 9 and 32, the arguments above for claims 1 and 24 apply. However, Harari, SDA, and Jones et al. do not explicitly disclose a Bluetooth transceiver. Ito teaches Bluetooth transceiver coupled to an expansion module (peripheral device 1) (Fig. 1 and [0039], [0040]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Bluetooth circuitry as taught by Ito in the expansion module of Harari, SDA, and Jones et al. to provide wireless connection to other systems.

As to claims 16 and 39, the arguments above for claims 1 and 24 apply. However, Harari, SDA, and Jones et al. do not explicitly disclose the accessory device includes a pedometer. Ito teaches pedometer (travel distance detecting circuit) (note [0043], [0097]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a pedometer as taught by Ito in the expansion module of Harari, SDA, and Jones et al. to detect the travel distances of an input device.

As to claims 22 and 45, the arguments above for claims 21 and 44 apply. However, Harari, SDA, and Jones et al. do not explicitly disclose the battery is rechargeable. Ito teaches rechargeable battery to provide power to the card module (note [0045]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include rechargeable battery as taught by Ito in the expansion

Art Unit: 2112

module of Harari, SDA, and Jones et al. so that the battery can be reused and thus minimizing cost for the user.

16. Claims 10 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al. (6,266,724) in view of “Socket to Support World’s Smallest Plug-in Card for Mobile Connectivity” (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), Jones et al. (6,438,638), and Friend et al. (Pub. No. US 2001/0032165) (hereinafter Friend), and further in view of Jones (6,145,046).

As to claims 10 and 33, the arguments above for claims 1 and 24 apply.

However, Harari, SDA, and Jones et al. do not explicitly disclose the accessory device includes a digital camera. Jones teaches digital camera using memory card (Fig. 1A and col. 3, lines 6-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement digital camera as taught by Jones in the system of Harari, SDA, and Jones et al. to provide picture capture function to the expansion module wherein the memory card in the expansion module can be used for frame storage.

17. Claims 11-13 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al. (6,266,724) in view of “Socket to Support World’s Smallest Plug-in Card for Mobile Connectivity” (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), Jones et al. (6,438,638), and Friend et al. (Pub. No. US 2001/0032165) (hereinafter Friend), and further in view of Nakashima (6,182,204).

Art Unit: 2112

As to claims 11-13 and 34-36, the arguments above for claims 1 and 24 apply.

However, Harari, SDA, and Jones et al. do not explicitly disclose the accessory device includes a FM tuner and/or television tuner. Nakashima discloses FM tuner and television tuner (col. 1, lines 14-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include FM tuner and/or television tuner as disclosed by Nakashima in the expansion module of Harari, SDA, and Jones et al. for further receiving television and/or radio broadcasts to the system.

18. Claims 15 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al. (6,266,724) in view of "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), Jones et al. (6,438,638), and Friend et al. (Pub. No. US 2001/0032165) (hereinafter Friend), and further in view of Yu (6,362,794)

As to claims 15 and 38, the arguments above for claims 1 and 24 apply.

However, Harari, SDA, and Jones et al. do not explicitly disclose the accessory device includes a wireless networking card. Yu teaches wireless networking card (wireless LAN card) (note col. 1, lines 6-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include wireless LAN card as taught by Yu in the expansion module of Harari, SDA, and Jones et al. to provide connection to a wireless network.

Art Unit: 2112

19. Claims 17 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al. (6,266,724) in view of "Socket to Support World's Smallest Plug-in Card for Mobile Connectivity" (SD Card Association – Press Room, June 26, 2000) (hereinafter SDA), Jones et al. (6,438,638), and Friend et al. (Pub. No. US 2001/0032165) (hereinafter Friend), and further in view of Rajchel (6,272,575).

As to claims 17 and 40, the arguments above for claims 1 and 24 apply.

However, Harari, SDA, and Jones et al. do not explicitly disclose the accessory device includes a cellular telephone transceiver. Rajchel discloses a card module to receive cellular telephone transceivers to be used with a handheld computer (col. 4, lines 25-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include cellular telephone transceiver as taught by Rajchel in the expansion module of Harari, SDA, and Jones et al. to quickly establish a national telecommunications network.

Response to Arguments

20. Applicant's arguments filed 08-02-04 have been fully considered but they are not persuasive:

Regarding Applicant's argument with respect to claim 47 on pages 10-11 of the Remarks that "Ito et al. teaches that the accessory device is a PCMCIA interface and has an SD card slot.... Thus, the type of a card which is to be inserted into the expansion slot is the same as the type of interface which is used in the portable electronic device", first it is brought to Applicant's attention that the features upon which applicant relies (i.e., *SDIO interface* and/or *the type of card which is to be inserted into the expansion slot is the same as the type of interface which is*

Art Unit: 2112

used in the portable electronic device) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Second, the accessory device does not necessarily communicate with the PC through the PCMCIA interface as argued by Applicant, instead they can communicate through the radio interface antenna 26 (paragraph [0067], [0068]). Third, suppose that *the interface is SDIO interface which is the same type of interface used in the portable computer*, note that SDA teaches SDIO card which can be plugged in electronic devices such as handheld computer (pages 1-2). And therefore, it must have an appropriate interface to interface with the interface of the handheld computer to which it is coupled.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2112

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trisha U. Vu whose telephone number is 571-272-3643. The examiner can normally be reached on Mon-Thur and alternate Fri from 8:00am to 5:30pm.

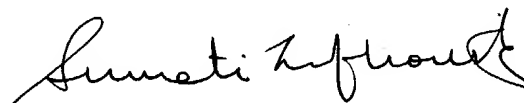
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Trisha U. Vu
Examiner
Art Unit 2112

uv



SUMATI LEFKOWITZ
PRIMARY EXAMINER